As a child, Tam Nguyen felt “empty deep in my heart.” The Vietnamese girl became deaf when she was just nine years old, losing friendships and her previous way of life.

Tam – pronounced “dom” – now 31 and a biology student at Northern Arizona University, underwent two surgeries in her home country, but they did not improve her hearing.

“I couldn’t be a top student because I didn’t hear what my teachers were saying,” Tam said over a cup of green tea. “And my friends and family thought I was annoying. I had a loud voice.” Assuming she was ignoring them, they thought she didn’t care, when actually she didn’t hear. Children teased her, and she began retreating into a shell of frustration.

It was her father, a self-educated farmer and former tailor, who became her rock, encouraging his middle daughter to educate herself in the ways of the world and beyond.

“I would always ask, ‘Why? Why? Why me?’” she recalled, her feelings of sadness and anger heightened by the fact that she was teased or ignored much of the time. “My father would say, ‘It’s OK. Don’t compare yourself to anybody.’”

Her father, Nguyen Van An (in the Vietnamese culture the family name comes first), taught her meditation to find peace, needlepoint to release her anger, and lip-reading to survive.

He would wake her up at 3 in the morning “when the second rooster singer sang” to teach her lip-reading when he thought the brain was the sharpest.

“This was when our house was quiet. We had a small house and no privacy like you have here – small rooms, small house. He would use a blackboard and chalk to teach me.”

Tam lived with her parents and six siblings in the village of Ba-choi, near Da Lat City in Vietnam’s Mountain Highlands Region. Her modest home contained no books, so her father took her to the

(continued on page 14)
Just a few days ago, I learned about the fascinating story of how the European Union (EU) came to consider and ultimately endorse ERASMUS, the highly successful project that facilitates the mobility of European students within the European Union. A group of individuals who came up with the idea for the general ERASMUS framework decided to go to the EU to present the concept. They were given a hearing but then told that it would be too expensive to fund, too difficult to organize, as each country already had its own system, etc., etc. They went away a bit discouraged but decided to look at the agenda for that very day at the EU. They discovered that just before they presented, there was a debate about how the stockpile of stale butter that builds up within the EU each year would be discarded. They further learned that the EU agreed to pay off the bill, which was more than 10 times what it would have cost to implement the ERASMUS program. In effect, the EU was willing to pay millions of dollars to get rid of stale butter but unwilling to pay substantially less to support the international education of its students.

ERASMUS has enjoyed an amazing success story since its founding in 1987. More than 3 million students have had the chance to study abroad since then, and more than 300,000 faculty and staff of EU universities have been able to participate in exchanges (http://ec.europa.eu/education/lifelong-learning-programme/erasmus_en.htm). This is remarkable by any measure, and has been aptly characterized as the world’s largest and most successful student-exchange program. Because of ERASMUS, students are having rich immersive cross-cultural experiences as well as learning new skills through internships. Faculty are collaborating with their colleagues at universities across the EU, and as a consequence, pushing the boundaries of knowledge and transferring that knowledge in their classrooms. It is clear that the Europeans are doing this not only because they can afford it, but because they see this as fundamental to the integration project, which, by extension, is the only real hope they have of avoiding a regression into the internecine warfare that has shaped so much of European history. With a strong higher-education infrastructure, with citizens who are well educated to meet the demands of a globalized world, and with their ability to respond to the need for intellectual capital, the Europeans are better positioned to build a future of peace and prosperity.

Is there a counterpart to the ERASMUS program in the United States? Well, the only one that exists at a national level is the Benjamin A. Gilman Scholarship, which is sponsored by the Bureau of Educational and Cultural Affairs of the U.S. Department of State and managed by the Institute of International Education. Granted, there are other programs that fund students to study abroad, like the Truman fellowship and the Marshall scholarship, but these are elite programs that fund very few students per year. The Gilman scholarship is more democratic in its application and offers grants for U.S. citizen undergraduate students of limited financial means to pursue academic or credit-bearing, career-oriented internships abroad (http://www.iie.org/en/Programs/Gilman-Scholarship-Program/About-the-Program). This relatively new scholarship opportunity funds about 2,300 students per year at an average scholarship amount of $4,000. Unlike ERASMUS, it does not have..."
Ask an average person on the street what they think of first in relation to science and engineering and they are likely to say “data. . . lots of data.” Although collecting data is certainly an important element of research and innovation in the science, technology, engineering, and math (STEM) disciplines, new insights in these areas actually arise not from the data per se but from the critical analytic discussion about that data within the scientific community.

Communicating face to face in labs or at conferences, writing in e-mails and scientific communications or via videoconference in online meetings, scientists collaboratively test, compare, and discuss their findings to arrive at new insights about what the data actually tell us. . . about climate change, or the strength of a new material, or the efficacy of a new production method. Clearly, efficient, concise technical communication is the lifeblood of the science and engineering enterprise.

One side effect of the rapidly globalizing economy has been that communication among scientists and engineers has become more challenging, as research and production teams and facilities are distributed across many cultures and languages in countries around the globe. Modern scientists working in globally distributed teams must find a common language, and even when that language is English, must have a keen understanding of the difficulties of communicating in a foreign language for the sake of non-native English speakers in their working groups. As a result, foreign-language training has become a valuable investment for engineers and scientists looking for leadership positions in global enterprises.

The increase in engineering and science students incorporating foreign-language learning into their studies has raised an interesting question: What changes are needed in modern-language pedagogy to accommodate engineering and science majors? Most obviously, the content of language instruction materials must be adapted and extended to cover the special practical needs of engineers and scientists: vocabulary must strongly emphasize numbers, calculation, technical equipment, and scientific processes; the scenarios presented in learning exercises must focus less on cafés and marketplaces and more on factories, labs, and the technical processes that happen in them. A somewhat less obvious in-
Cuisine in the Ming Dynasty: A Window into Culture

By Prof. Xiaoyi Liu

Perched at the northeast corner of the China domain, with easy access to the trade routes used for hundreds of years, the city of Beijing’s geographic position brought to it a rich assemblage of food plants, spices, and flavorings from a variety of cultures.

As an example, the pastoral peoples the city faced in the north, particularly the Mongols—who were to become China’s rulers in the 14th century—made substantial contributions to the culinary culture. Following the Yuan conquest, the middle-Asia collaborators, whose population penetrated throughout northern China, brought significant Islamic influences to regional cuisines. And if Marco Polo’s travelogue account is to be believed, there was a sizable population of “Christians, Saracens, and Cathayans, about 5000 astrologers and soothsayers” among the “Khan-badik” or Beijing inhabitants at the time of his wanderings. The conglomeration of foreign and domestic cultures would inevitably bestow a vibrant and eclectic cultures would inevitably bestow a vibrant and eclectic kitchen on the metropolis.

The Ming founding emperor Hongwu was a man of austerity and frugality. To prevent his descendants from indulging in gastronomic excess, he strove to set up an exemplary dining pattern. He demanded that palace foods be prepared in “regular supply,” a family-style cuisine. And to show that he had not forgotten his simple origins, he made tofu a requirement for his breakfast and dinner menus. Empress Ma frequently visited the palace kitchen to supervise the cooking.

But for Hongwu, dining was more than an occasion to display the virtue of frugality. It constituted an important institution in which distinctions regarding social hierarchies were to be addressed. He devised a set of regulations on dining protocols, with a special emphasis on the classifications of dining vessels and their usage. The privilege of rank was a primary consideration when deciding eligibility to access a certain vessel. For example, dudes, marquises, and officials of the first and second ranks were entitled to use golden wine bottles and wine cups, while the rest of the emperor’s court was restricted to the use of utensils made of silver.

During the Ming Chenghua reign, it became quite trendy to pursue material comforts, and the imperial palace played a leading role in this endeavor. Although tofu remained an essential offering on the royal menu, its courtly version was made not from bean curd from yellow beans, but rather from the brains of nearly a thousand birds, dressed to resemble the lowly tofu dish.

The Hongzhi emperor ordered all the shops and inns abutting the avenues in Beijing and Nanjing to have their lanterns lit in the evening, illuminating the streets as his ministers returned home from royal banquets. The writings of later Ming scholar-officials were filled with records of parties, menus, and cooking styles. Indeed, Epicureanism had become such a popular topic that one’s knowledge of cuisine was reckoned a sign of erudition and nobility. Zhang Juzheng, the prime minister of the younger Emperor Wudi, complained that he had “nowhere to settle chopsticks” when more than 100 dishes were laid in front of him at a regular family dinner.

Regarding food today — considered one of the four “primary material concerns” besides clothing, travel, and housing: it is essential

As we approach San Luis, Arizona, at 4 a.m., sky pitch black, we can see a string of lights stretching miles and miles to our left and to our right. Although we know we are headed to the border, it takes a while for it to sink in: this is the wall. Once in San Luis, we disembark from the vans. It is like a small-town version of Times Square in the middle of the night. In the streets, people are streaming north. Women stand in small groups, their faces wrapped in bandanas, hats, gloves — bodies covered head to toe. There are people of all ages, from young teenagers to very old men. Nearly all have been up on the Mexican side of the border since 1 a.m., waiting in line to cross so they can work in the vast industrial agricultural fields of Yuma, Arizona. Our first-year seminar class, “Just Food,” has come to San Luis in the wee hours to bear witness, to learn, and to talk to these mostly Mexican workers. Students are nervous. We all are. We’ve divided into small groups, each with someone who can translate. We ask and we listen, gathering stories until, as the light breaks, the last of the thousands of workers who cross each day have boarded buses that will take them to the fields.

It is late March, the end of the winter growing season in Yuma, where 90 percent of the winter greens consumed in the United States are grown. Who knew? And who knew about the lives of those who harvest and process this bounty? Why must they do this? On our three-day field trip to San Luis and Yuma, students pressed for answers to these and many other questions, as they spoke to migrant workers, the farmers who employ them, technical experts who gain their livelihood in industrial agriculture, human rights advocates, and border patrol agents.

The course “Just Food” asks a not-so-simple question: What might a just food system look like? Few students have given this question much thought; most know next to nothing about where their food comes from, who labors to get it to their tables and under what conditions, or how the current system affects the earth.

In the classroom, they study the industrial food system with special attention to justice for workers, for animals, for the health of the soil, water, and the earth’s climate. Without exception, the field experience transforms their learning. A political theorist by training, I recognize what transpired on the field trip as a powerful instance of citizenship education.

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(continued on page 17)
The Fulbright Foreign Student Program (http://foreign.fulbrightonline.org), one of the U.S. government’s premier educational-exchange efforts, brings international students to the U.S. for graduate-level study. In fact, more than 1,800 new Fulbright Fellows enter U.S. academic programs each year. The highly competitive awards are offered to the best and brightest, typically early-career professionals who, upon completion of their studies, return to their home countries to take on leadership positions, often in universities or government service. Recipients of these prestigious awards receive grants that cover all expenses, including travel, tuition, room, board, and educational materials. To be awarded a fellowship, prospective students apply through either the Fulbright Commission or the U.S. Embassy in their home countries. At NAU, these students enrich our programs and campus community in many ways. In class, they offer new insights in classroom discussions and broaden the worldview of our domestic students. Moreover, their presence on campus promotes mutual understanding between domestic students and those from other countries. The Fulbrighters themselves gain a tremendous amount from their NAU experiences, including introductions to and involvement in new types of classroom environments, what they perceive as novel faculty-student relationships, and current thinking in their fields of study. MA-TESL Fulbrighters often share their perspectives at local, state, and national conferences, contributing to the professional growth of other language researchers and teachers.

After the first of their two years at NAU, currently enrolled MA-TESL Fulbrighters—from Kyrgyzstan, South Africa, Uzbekistan, and Yemen—have all described their MA-TESL experiences as “life changing.” Their experiences have altered the ways in which they think, view the world, and perceive the field of applied linguistics and language teaching, and they see themselves as “cultural ambassadors” (who can and do break down the barriers of stereotypes) and professionals who can make a difference when they return to their home countries. Their comments capture the value of their Fulbright experiences at NAU:

- “My Fulbright experience at NAU is, no exaggeration, the most productive and rewarding experience in my life. NAU has a top-notch TESL program. The intensity...” (continued on page 17)

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The Global Reach of NAU’s School of Forestry

- Teaching courses in San Ramon, Costa Rica with USAC. Taught NAU course at Ometepe Island, Nicaragua.
- Collaborating with the University of Natural Resources & Life Science, Vienna, Austria on tree caviation & use of acoustic to deter wood infesting insects.
- Collaboration with the Forestry & Agricultural Biotechnology Institute, Pretoria South Africa on tree pathogens & mites associated with insects.
- Proposal to study insect acoustics at Centre for Ultrasonic Engineering, University of Strathclyde, Glasgow, Scotland.
- Research on insect chemical communication with Canadian Forest Service, Laurentian Forestry Centre, Quebec, Canada.
- Research on insect virus with the University of Canterbury, Christchurch, New Zealand.
- Project manager of “Translating forest science for global practitioners” that is funding research in Spain & Mexico for graduate students in the School of Forestry.
- Research mentored five post-doctoral scholars from the countries of China, France, Italy, Mexico, & South Korea who studied forest ecology at NAU.
- Research collaborator & co-author of research articles about global carbon exchange with more than 80 international scientists from dozens of countries.
- Recipient of Senior Fulbright Fellowship for work on conflict, avoidance, resolution & management at Africa Union Commission Headquartes in Addis Ababa, Ethiopia.
- Co-organizer of a symposium on mainstreaming environment & sustainability.
- Education in Ethiopian & South Sudanese universities in Ethiopia.
- Helped to put together a winning proposal for PhD in Environmental Science & Management at Addis Ababa University in Ethiopia.
- Served as a graduate advisor for students from Ethiopia, Nepal, Germany & Mexico.
- Supervised & worked on PhD dissertation research in Durango, Mexico.
- Runs NAU study abroad courses to Ghana & has conducted research with colleagues from the Forestry Research Institute of Ghana.
- Developed an exchange program for forestry students & faculty with Southern Cross University in Australia.
- Co-Principal Investigator for a research project developing genetic resistance & pest management approaches to control the mahogany shoot borer in Yucatan, Mexico.
- Conducts mistletoe research in Mexico & serves on the Master’s degree committee of a student at a university in Durango, Mexico.
- Spent part of a recent sabbatical working with a colleague in Australia.

Forestry faculty involved in international teaching and research projects

- Jim Allen:
  - Currently advising a PhD student working on a forested wetland regeneration project in the Federated States of Micronesia.
  - Currently advising two Master’s degree students with projects based on their work in Malawi (agroforestry) & Zambia (social forestry & community development).

- Paul Beier:
  - President of the Society of Conservation Biology, an international professional society with more than 5,000 members worldwide.
  - Recipient of two Fulbright fellowships for work in Ghana, where he helped create a nature reserve.
  - Trips to Bhutan at the invitation of the national government to advise them on conservation issues.

- Matthew Bower:
  - Hosting a post-doctoral research associate from Brazil.
  - Research across Spain, & ongoing collaboration on dryland soil function.
  - Hosting visiting scholar from Universidad Autonoma de Madrid (Spain) to apply advanced statistical techniques to xerophytic shrubland ecology.
  - Research in Sierra Wildlife Preserve (Australia), & ongoing collaboration with a colleague at University of New South Wales on shrub encroachment & hydrology.

- Carol Chambers:
  - Will host a visiting professor from University of New England (Australia) to plan future collaborative research.

- Pete Fulé:
  - Fire ecology research in partnership with Mexican scientists throughout Mexico for over 20 years, measuring fire-climate-forest interactions with implications for adapting to climate change & restoring forests.
  - European research on fire ecology in Spain, Greece, & France has led to publications using tree ring analysis to reconstruct past fire regimes in the Mediterranean Basin.
  - Invited instructor for multi-university graduate program in Spain for 5 years, focused on restoration ecology.
  - Currently teaching in USAC in Pau, France.
  - Serves as an advisor for graduate students in Spain & Greece.

- Yeon-Su Kim:
  - Research on reducing deforestation & forest degradation (REDD) in Indonesia, in cooperation with colleagues from the Korea Forest Research Institute.
  - Exploring educational partnerships with Indonesian universities & serving as an advisor to a PhD student from Indonesia.
  - Presented recently in Thailand, where she collaborates with a colleague & former PhD advisee who is now a faculty member at Khon Kaen University.

- Richard Hofstetter:
  - and

- Tom Kolb:
  - and

- Areigi Tecle:
  - and

- Michael Wagner:
  - and

- Robert Mathiasen:
  - and
By Prof. David Trilling

Meeting in San Francisco in collaboration with the American Educational Research Association on May 1, 2013, a group of eighteen prominent national and international scholars met in San Francisco and recommitted themselves to confronting issues of poverty faced by schoolchildren in the world and to work towards global improvement in the education of girls. These urgent matters are a worldwide problem with over 100 million children not in school, the majority being girls. The two primary thrusts surrounding how to enable Flagstaff Seminar research to activism were seen as a clear call to action for the participants to continue their work towards ensuring that education is a basic human right and that educational leaders can and must become emboldened to seek solutions that go beyond the school house door, even if this means confronting historic cultural and political forces that act as barriers to basic improvements in the reach and quality of education in the world. Reaction to the concept paper framed the discussion, that is, how do we extend what we do beyond leader preparation? Points of discussion included the following:

1. A document of intentional work—A call to action and activism
2. Three issues-access, quality, and equity—All must be addressed
3. Education, all in education, must tackle all together
4. Shortage of teachers—what values are held here—a smaller focus? What is an answer?
5. Quality of pre-service training and in-service is critical
6. Holistic language in education—what’s missing becomes the notion of the purpose of education; going beyond schools; so tied to comprehensive reform that the beauty gets co-opted by language used by educational researchers
7. Food scarcity exists for 25% of children in the world: they go to bed hungry. What does this mean just to the US? And, to the education system that really teaches the whole child? What is the role of the school in that community? How do we promote sustainable development?
8. Leaders in schools want to know how to do Educational Sustainability Development. Leaders without borders know what is happening elsewhere. They must know the How but also the moral Why.
9. How do we extend what we do beyond leader preparation and focus on purpose, not just the How?
10. There are lots of borders, not just geographical. Our responsibility is to prepare educational leaders.

Discussions and commitments focused on the compelling needs of education worldwide: the de-professionalization of the teaching profession, the increasing poverty gap between the have’s and have not’s, and the political world issues that address political issues: resource allocation, partnerships with organizations to leverage political clout, global marketization and how not to feed the beast, access to technology and the generation of knowledge, and how we organize to address the policies that we do not have much leverage over. We concluded this meeting with the following actions:

1. Continuing to develop the networking with individual scholars and professional organizations worldwide
2. Continue to identify the issues
3. Identify the opportunities for action
4. Identify the efforts to work for locally based solutions

The collective research and scholarship of the group spans four decades of national and international work and exceeds 300 books, handbooks and encyclopedias, as well as hundreds of research journal articles in most major North American, European, Australian and African nations.

The FS scholars have set the next meeting for August 2-3, 2015 in collaboration with the National Council of Professors of Educational Administration. For additional information, visit www.flagstaffseminar.com or www.educationalleaderswithoutborders.com

Standing left to right: Carol Mullen Virginia Tech University; Martha McCarty Loyola Marymount Los Angeles; Jim Berry, Eastern Michigan University; Nathan Bond, Texas State University; Cate Grace Emestrom, Nigerian Professor of Education Administration; Eeye Sandigyes, Executive Director of Kappa Delta Pi International Honor Society in Education; Carolyn Shields, Wayne State University; Ira Bogotch, Florida Atlantic University, Michael Sampson, Northern Arizona University; Concha Delgado Gaitan, University of California-Davis; Jane Lindsey Clemens, University of South Carolina; Lisa Ehrlich, Queensland University of Technology, Australia; and Don Scott University of Calgary, Canada. Seated: Femiwik Singh, University of North Carolina-Chapel Hill; Rosemary Papa, Northern Arizona University.
Much of her delicate, realistic embroidery is of birds (which represent freedom to Tam) and of flowers. Photo: David Edwards

“Inner Peace,” Tam Nguyen

Stale Butter (continued from page 2)

an exchange component, but this scholarship has made a profound difference in the lives of many of these students. They return preaching the study-abroad mantra, which is, “study abroad has changed my life!”

What is astounding, however, is that while the EU spends more than $600 million per year on ERASMUS, the U.S. government spends barely more than $9 million on the Gilman program. This is happening at the same time as there is, in the U.S., an obsessive focus on MOOCs and three-year bachelor’s degrees, and while we witness the largest declines in state and federal funding of higher education in U.S. history. So we are now able to save millions of tax dollars — big deal! But what are we losing as a consequence? What can we possibly be thinking, a question that historian Timothy Garton Ash recently chose to ask in his own way, in a piece in The Guardian in which he recommends that “America should do a reverse Columbus.” He argues that the world has long lost reason to discover America, given our penchant for inflicting self-harm (the shutdown of the U.S. government being only the most recent example), and the consequent erosion of political power and prestige. Rather, he believes, Americans need to discover the view of America by the rest of the world.

I think that Ash is on to something, but I would extend his belief a bit further. It’s not good enough for Americans to only discover how the rest of the world sees them. In fact, it is much more important for Americans to actually learn from how the rest of the world sees them. And in so doing, they will also learn about how they are perceived by the rest of the world. And it is in this

Fall 2013 NAU GLOBAL 15

“The European Commission, Education and Training, The ERASMUS Program & Studying in Europe and More

Benjamin A. Gilman International Scholarship


Historian Timothy Garton Ash recommends that “America should do a reverse Columbus.”

Scholarship and Restored Hearing

(continued from page 1)

library and encouraged her to read. She took her out into nature and the family farm to teach her to observe and meditate.

While her mother, Le Thi Sen, wanted to protect her deaf daughter, her father always pushed her out into the world and encouraged her to pursue education, including the study of English. In fact, he found people to introduce her as a child to English, Chinese, German and French.

Because of her society’s belief in karma, Tam was burdened with deep questions about her hearing loss, the result of an infection.

“If you have good karma, you have a good kid,” she said. “So how can you have good karma if you have a child with a disability?”

Tam’s karma was never bad, of course, and finally led her to Flagstaff and NAU.

After finishing high school in Vietnam, Tam went on to earn a medical-assistant diploma from Lotus University in Ho Chi Minh City, formerly Saigon, and traveled throughout her country for two years. Her father encouraged her travel, knowing that while she could not hear, she could observe people and nature and life to educate herself. She continued improving her silk needlework, becoming a skilled embroidery designer and artist.

In 2007, Tam crossed paths with an American who was visiting Vietnam. She met him through her sister, who asked Tam to show him around the country. After he left, they stayed in touch. It wasn’t long before he asked her to visit him in Flagstaff. With the blessings of her parents, she traveled to Flagstaff, where her sister already lived. Later that year, she married Sam Neeley, and they live in Flagstaff.

In Phoenix, Tam found a specialist and after three operations, her hearing was restored. Because she had been deaf for two decades, she needed to improve her speech. She wanted to be heard and understood. She spent three years in NAU’s Speech Therapy program to learn how to articulate English words better.

Now she is working on a biomedical degree at NAU, and has participated in research in the Biology Department as an undergraduate.

She balances her schoolwork with her needlework.

Much of her delicate, realistic embroidery is of birds, which represent freedom to Tam, and of flowers. The framed artwork ranges from a family of cranes to sprays of orchids, with vivid colors shining through the silk. She began the work as a hobby, but now hopes to sell some of her art to help pay for her education.

Her artistry in needlework is also reflected in a 3-D embroidered piece of NAU’s Old Main, which she presented to President John Haeger in the Fall Semester, 2013.

“When you look at it, it is simply exquisite,” said Harvey Charles, NAU’s Vice Provost for International Education. But her praise goes beyond her artistic talent. Charles marveled at Tam’s resolve.

“How could a non-native speaker of English overcome all these pretty significant challenges, come to the US, have her hearing restored and still be so motivated to invest all the time and resources necessary to pursue a career in scholarship?” he wondered.

For Tam, it is all about her father, and others who have helped her along her path.

“He sacrificed his life for me,” she said in a soft yet strong voice. “When I was young I was not appreciating him. I would get upset with him when he would wake me at 3 in the morning. But now I see all he did for me.”

And he encouraged her to travel to the United States to try to regain her hearing, and better her life.

“In my country, traditionally the girl does housekeeping, manages the family and raises kids,” she said. “The woman doesn’t have a voice to talk. My parents told me, ‘There is no way to get out,’ because the family was working class.

“OK, I’m starting my life,” she said of her Flagstaff life, as her voice bubbled in laughter. “I want to be a researcher.”

Tam Nguyen is a client of Literacy Volunteers of Coconino, and has published several articles in the Arizona Daily Sun “Gardening Etcetera” column, edited by Dana Prom Smith, one of Tam’s Literary tutors. Her most recent column focused on the vegetable daikon, and her mother’s cooking of this leafy plant with its white root. She has a deep knowledge of plants and food production.

“I can never say enough thanks to the people who have helped me,” she said of Smith and of Ann Beck, former executive director of Literary Volunteers. “Ann is second mother to me.”

Beck called her young friend a phenomenon.

“Tam’s enthusiasm for life and learning is infectious. She makes friends everywhere and learns from everyone she meets,” Beck said.

Tam received an International Office scholarship to pursue research with biology professor Sylvester Allred, focusing on the traditional and commercial impact of foods.

“The knowledge he knew, I carry with me,” she said of her father. “His life, his secrets. My father said, ‘Education does not make your stomach full. But it will make things different.’”

Mary Tollan is Associate Professor in the School of Communication

Needlepoint by Tam Nguyen

Historian Timothy Garton Ash

NAU GLOBAL 15 Fall 2013

Photo: David Edwards

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Continued on page 3

Continued from article

"Stale Butter (continued from page 2)"

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"Benjamin A. Gilman International Scholarship"


"Historian Timothy Garton Ash recommends that “America should do a reverse Columbus.”"
The nature of reality and the abstractions humans use to make meaning about reality. The deforested Liguria remains a great democratic social movement, a focus on the literacy needs of historical black African students. "My Fulbright experience has exposed me to opportunities for professional growth that extend well beyond the classroom. I'm certain that the valuable education and professional skills gained at NAU will carry me through my career, during which I'll be able to enhance, promote, and contribute to TESL in South Africa and make a difference in my professional community, which connects students in relation to a global context but also seek to gain cultural insights through the dominant and not-so-dominant features that can mark cultural distinction. It turns out that the cuisine of a particular region or place, and how it is negotiated, can speak volumes about a culture. Never again should we take a superficial perspective on the range of cuisines to which we're exposed. They each tell unique stories that involve history, religion, lifestyles, and values. Most important, however, they tell stories of the human experience, and, ultimately, offer insight into who we are.

Xiaoyi Liu is a lecturer in the Department of English Language Reading (Arizona), as an example, has now contributed to the field of disciplinary writing. Gihan Wood is associate professor in the Department of Comparative Cultural Studies. Kimberley Curtis is interim director of the Master's in Sustainable Communities program.

Our Fulbright-sponsored TESL and Applied Linguistics graduates have, in fact, made a difference. Some have gone on to pursue doctorates and have now contributed to the field in the areas of disciplinary writing (Marwa Haroun, Egypt), second-language reading (Eun Hee Jeon, Korea), and applied corpus linguistics and cross-cultural communication (Eric Faas, Indonesia). Many have taken on leadership roles in universities, language programs, and language-teacher associations. Eliana Lili (Albania), as an example, was hired in the only American University in Albania. She states that her Fulbright experience gave her the "competitive edge." She is educating a new generation of Albanian students, who see her as a role model.

Kabelo Sebolai (South Africa) is transforming the curriculum at the Central University of Technology in Bloemfontein, South Africa, with a focus on the role of language in historically disadvantaged black African students. Billa Annassour (Niger) has taken on a leadership role at the American Cultural Center in Niamey, where he serves as English Language Program director. SonCa Vo (Vietnam) has co- developed an online teacher-training program to reach English teachers in rural Vietnam. Sultan Mohammad (Pakistan) was promoted to assistant professor at Hazara University, where he serves as coordinator of the Master's in Applied Linguistics Program and president of the Academic Staff Association. These few examples demonstrate that NAU's Fulbrighters have built upon their educational experiences in our TESL and Applied Linguistics programs to become world-class professionals.

Fredricka L. Stoller is professor in the Department of English and Applied Linguistics. She has contributed to the field of disciplinary writing and has now contributed to the field in the areas of disciplinary writing (Marwa Haroun, Egypt), second-language reading (Eun Hee Jeon, Korea), and applied corpus linguistics and cross-cultural communication (Eric Faas, Indonesia). Many have taken on leadership roles in universities, language programs, and language-teacher associations. Eliana Lili (Albania), as an example, was hired in the only American University in Albania. She states that her Fulbright experience gave her the "competitive edge." She is educating a new generation of Albanian students, who see her as a role model.

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study the connections of one place to another. For much of my life I have been interested in how plant communities change through time and what general processes are important in driving that change. These processes include climate, fire, insect infestation - and for the last few thousands of years, humans. This interest has led me – along with my students and others – to try to better understand how environments have changed not only here in western North America, but also to be able to place this understanding in the greater global context.

Perhaps the relationship between ecology and geology, both local and global, is better realized through using an example. It is difficult to find a place on Earth that has not been affected by human activities over long periods of time. Our species has been part of the world for a few thousand years, shaping the landscape to best suit our needs. One way that paleoecologists can deduce the history of human impact over time is to look at the record of activities as found in the sediments of lakes and bogs. Much of the data excavated in the bottom of lakes over time and those muds include pollen and seeds from plants, and soils and other particles from environments near the lake. If in the past, a society specialized in, say, farming, animal herding or mining, evidence of those activities would end up in the lake. Taking a sediment core from that lake and studying the fossil remains allows paleoecologists to reconstruct the changes in the environment through time. Ecology and geology, combined.

Even though cultures differ from one place in the world to another, we can learn volumes about our species and our relationship to Earth’s environment by comparing the records of human impact from different locations. For example, in Spain we have been working with our Spanish colleagues in both the Sierra Nevada and in the Pyrenees examining sites that help us understand the landscape changes associated with human activities during the last 6,000 years. In Norway, we are examining sites that are in association with the first Nordic inhabitants that settled far northern Norway at the end of the last ice age (about 11,000 years ago), and whether they had any impact on the landscape at that time. Looking at the charcoal particles from a lake core, we are studying the potential impact of the ancient Mayan culture on forest management and agriculture in the Yucatan Peninsula.

We can learn much about our future by studying how human societies the world over have responded to changes in the past.

R. Scott Anderson is Professor in the School of Earth Sciences and Environmental Sustainability

Astronomy as Perspective (continued from page 12)

It is critical to help our students learn to navigate these international waters, capitalizing on access to people around the world while meeting individuals from other cultures in order to shape and understand others. The measure of our success will be in training globally competent students who will succeed in walking this path.

In modern astronomy, it is impossible to achieve important astronomical advances without collaborating with scientists from around the world. In turn, these international collaborations allow us to answer questions that are common to all humanity. And yet, despite our common scientific and technical ground, the way we understand problems and our approaches to problem solving may vary as a result of cultural differences among researchers. As global citizens, we must learn to work with these differences to achieve our goals.

David Trilling is associate professor in the Department of Physics and Astronomy

Sprechen Sie STEM? (continued from page 4)

new pedagogy must be developed to meet these challenges.

- Inventory the techniques and materials faculty developers may use to develop a forward-looking language instructor, using these concrete examples as a basis for defining the complete spectrum of concepts, vocabulary, and linguistic skills that must be mastered by STEM majors. This defines a pedagogical framework that must be fleshed out with actual exercises, projects, and other learning materials.

- Develop a roadmap for rapid coordinated development of missing curricula and teaching materials to populate the framework, including work plan, technological infrastructure, and funding strategy.

The vision developed by workshop participants, called the STEMINTegrate model, was centered around a first draft of a bi-lingual knowledge schema for representing the specialized STEM-oriented language concepts that will be critical for competent STEM-oriented communication. The schema focuses on numbers, counting, and other basic STEM-oriented vocabulary at the lowest level; moves to second-order concepts like measurement, calculation, and description of complex machines or laboratory instruments; and then on to advanced descriptions of complex STEM processes across different time scales and tenses. To support efficient development and sharing of teaching materials, the team outlined a vision for a sophisticated web-based portal and archive to serve as the cornerstone of the Language for STEM community. In this portal, language instructors could collaborate with STEM professionals from around the world to develop, post, and review new course materials, indexed by skill level, nature of concepts being taught, and specific STEM discipline that the materials are based on.

The overall goal is that any foreign-language instructor at any university in the United States should be able to very quickly download curricular plans and course content to develop a STEM-oriented language course customized to the particular mix of STEM majors in an upcoming semester.

Adding foreign-language training offers ambitious STEM majors significant competitive advantage in tomorrow’s global STEM labor market, but it can be challenging with a program of already quite dense study in engineering and the sciences. This goal places a premium on efficient language learning tailored precisely to the very practical applied language (learning goals of scientists and engineers), vocabulary and processes in each major. The STEMINTegrate model, once completed, will provide a basis for revolutionizing language instruction for the STEM disciplines, allowing faculty to easily share their best practices, course materials, and curricula with colleagues nationwide. This will allow easy integration of STEM-specific teaching in any foreign-language program, but will be particularly useful for intensive STEM internationalization initiatives like Northern Arizona University’s Global Education and Engineering Program (GSEP, www.nau.edu/gsep), which incorporate foreign-language learning as a central element of internationalized STEM degree programs.

Ed Duerly is faculty director of the Global Science and Engineering Program and Professor of Computing Science

Religious Objects (continued from page 9)

I strive to educate their visitors about the world’s cultures; indeed, American museums receive 850 million visits annually (http://www.aam-us.org/about/museums/museum-facts). Efforts by museums to aid people in understanding world cultures, appreciating cultural differences and similarities, are of enormous importance.

Bruce M. Sullivan is professor of comparative study of religions and Asian studies in the Department of Comparative Cultural Studies

Global Perspectives (continued from page 3)

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